OBSERVATIONS

On the BILLS of

MORTALITY,

In CARLISLE, for the YEAR 1780.

THE population of Great Britain muſt ever be a ſubject deſerving the attention of every lover of his country, and eſpecially ſince the commencement of the preſent war, it has become highly intereſting.

Within theſe few years, ſome very able writers have publiſhed their thoughts and calculations on this ſubject. Thoſe who are willing to depreciate the reſources of this country, and to magnify thoſe of our enemies, have endeavoured to perſuade us, that our ſituation is truly lamentable, and that population has rapidly and progreſſively decreaſed for theſe twenty or thirty years paſt.

The data from which theſe calculations and inferences have been made, are principally the returns of the window ſurveyors, and the books of the Cuſtoms and the Exciſe.

Others who from diffcrent ſources of information, have attempted to confute ſuch ſentiments, have preſented us with a more favourable picture; they with much appearance of truth, have endeavoured to prove, that the number of inhabitants in Great Britain, inſtead of decreaſing, has conſiderably increaſed, during the period above alluded to. In ſupport of the latter hypotheſis, I think it may not be improper to mention the following facts.

In the beginning of the year 1780, I made an actual, and I believe an accurate ſurvey of the two pariſhes *St. Mary's* and *St. Cuthbert's*, and found they contained 1148 houſes, 1872 families, and 7677 inhabitants.* A few months afterwards, another actual ſurvey was made of the two pariſhes, by *Mr Coulſon*, General Surveyor of the four northern counties for the

* See laſt years Obſervations on the Bills of Mortality, for Carliſle.

window tax, and *Mr. William Monkhouſe*, Surveyor of Cumberland, Leith, and Eſkdale Wards; and tho' I have every reaſon to apprehend, that their ſurvey was much more accurate, than ſurveys for the window tax heretofore have been, yet they only returned 815 houſes, the difference therefore between the real number of houſes, and the number returned to the window tax is 333. Now, to ſhew how fallacious all calculations are, with reſpect to the number of inhabitants in any particular place, founded on the returns of the Surveyors of the window tax, even when they make the moſt accurate ſurvey, let us ſuppoſe, I had wanted to aſcertain the number of inhabitants in Carliſle, and the adjoining villages, and had been ignorant of the real number of houſes which they contained, I ſhould have multiplied 815 by 6 and 2 thirds, which is nearly the number of people in each houſe, the product will be, 5433 nearly, which is 2244 leſs than the real number or two ſeventhe nearly of the whole. And if I had been ignorant of the number of inhabitants in each houſe, I ſhould moſt probably have multiplied 815 by 6, which would have made the difference ſtill more conſiderable.

The ſalubrity of Carliſle was proved by the Bills of mortality publiſhed laſt year; and it appears ſtill more evident from the preſent, for only 1, in 34 and a half nearly, of all the inhabitants have died this year in conſequence of diſeaſes.

And under 5 years old	1 in 9 and 9 tenths	nearly has died
Between 5 & 10	1 in 56 and 3 4ths	
10 & 15	1 in 357 and 1 half	
15 & 20	1 in 112 and 1 half	
20 & 30	1 in 83	
30 & 40	1 in 109 and 5 8ths	
40 & 50	1 in 85 and 4 5ths	
50 & 60	1 in 65 and 1 3d	
60 & 70	1 in 20 and 6 7ths	
70 & 80	1 in 10 and 5 8ths	nearly
80 & 90	1 in 6 and 4 9ths	
90 & 100	1 in 3 and 1 3d	

Table I. corroborates the obſervations made in laſt year's Bills, viz. that women live longer than men, for between 100 and 103 years old two perſons died, who were both females; 26 huſbands, and only 15 wives have died, although there are a greater number of wives than huſbands in Carliſle. See Table II. of laſt years Bills.

The Chincough, which tho' a nervous diſeaſe is nevertheleſs infectious, appeared in February, and continued ſeveral months, but did not make much progreſs. It proved fatal only to 10, who were all under 5 years of age, and who had not recourſe to medical aſſiſtance. The remedies which appeared to have the moſt ſalutary effects, were gentle emetics in the beginning, and the bark towards the concluſion of the diſeaſe.

In the beginning of April, the Meaſles made their appearance, and continued to rage with conſiderable violence till the latter end of July. Thirty-three children (ſee Table II.) fell victims to their immediate effects, and many more died of their conſequences; complaints of the lungs as is uſual ſucceeded the fever, which often terminated in ſome fatal diſeaſe.

This year thirty-five appear to have died of Conſumptions, (ſee Table II.) which is more than double the number that ſuffered by this diſeaſe laſt year, but which perhaps may be accounted for, from the effects of the Chincough, and eſpecially of the Meaſles. Of this number (viz. 35) 14 were between 10 and 40 years of age, and perhaps theſe 14 are the whole who died of a real, *idiopathic pulmonary* conſumption; and of theſe 14, 6 were between 20 and 30 years of age, which correſponds with laſt year's Obſervations, viz. that more die during that, than during any other period of 10 years. And as this complaint often originates from ſlight colds neglected, it may not be amiſs even again to caution the public, that the *diſeaſe* by every body denominated a *cold* ought not to be deſpiſed or trifled with.

Three patients have only died of the ſlow nervous fever, a circumſtance highly pleaſing, as it indicates the dry, pure, and ſalutary air of this city.

I ſhall here ſubjoin the following caſe of Epilepſy, &c.

A very remarkable CASE of DYSPHAGIA SPASMODICA, *and* EPILEPTIC FITS, Cured by *Cuprum Ammoniacum*.

JANE STOCKBRIDGE, became a patient of mine on the 9th of January, 1780. She is an unmarried country woman, in the 42d year of her age, of middle ſtature, and of a lax habit of body. About 12 years ago, either from grief or a fright as ſhe imagines, ſhe was ſeized with Fits, which during the ſpace of a quarter of a year returned once in 24 hours, and generally in the night. They afterwards became more frequent, eſpecially in the ſummer months, when ſhe was deprived of her memory, and indeed of almoſt all her mental

faculties. Within theſe two years they have only returned about twice or thrice a week.

In theſe fits, ſhe becomes inſenſible; her legs, her arms, and many of the muſcles of the trunk of her body are ſo violently convulſed, that three men are ſcarce ſufficient to hold her; ſhe foams at the mouth, and in this ſtate ſhe often continues near an hour, then gradually recovers, but is utterly ignorant of what has paſſed. About ſeven years ago, without any evident cauſe, ſhe was affected with a new and peculiar diſorder, viz. a difficulty of ſwallowing, with a ſenſation of ſtricture and tightneſs in her throat and breaſt, and was unable to ſwallow either ſolids or fluids, for the ſpace of ſeventeen days. During this time ſhe had no epileptic fits, was entirely ſupported by nouriſhing glyſters, and had neither any evacuation by urine or ſtool, but had a ſmall diſcharge of blood from her ears. Some remedies were added to the glyſters which however were attended with no ſenſible effects. On the ſeventeenth day a *probang* was introduced into her ſtomach; on the immediate removal of which, ſhe fainted near a quarter of an hour, then recovered, and was able to ſwallow both ſolids and fluids with eaſe, had a ſtool, and made near a gill of urine, of a gelatinous conſiſtence. This difficulty of ſwallowing or Dyſphagia Spaſmodica continued to return regularly every month for two years, and was conſtantly removed in the ſame manner, by the introduction of the *probang*, only with this difference, that in the ſecond year, upon withdrawing the inſtrument, inſtead of fainting, ſhe was ſeized with ſtrong convulſions. During the third year ſhe was perfectly free from the Dyſphagia. But the fourth year, it again returned without any evident cauſe, and ſhe had four or five paroxyſms. The paroxyſms became more frequent in the fifth year, viz. about once a month, and have continued ſo without much variation till the preſent time. Yeſterday morning, the 7th of January 1780, ſhe was again affected with the Dyſphagia, and on the 8th, (this day) I was preſent when Mr James, Surgeon, with ſome difficulty on account of the ſtricture in the gullet, introduced the *probang* into her ſtomach, and on its being withdrawn, a ſcene truly melancholy and alarming preſented itſelf to our view. She was ſeized with moſt violent convulſions, her head was bent forcibly backward ſo as to touch her back, and it was as much as three ſtrong aſſiſtants could do, to prevent her from beating herſelf to pieces. Theſe convulſions continued half an hour, when ſhe was able to ſwallow a little *æther* and water, but remained two or three hours in a diſagreeable ſituation, which however ſhe is unable to deſcribe.

Since the firſt attack of the Dyſphagia ſhe has ſometimes deferred the uſe of the *probang* for the ſpace of ſix days, during which time, ſhe never has any evacuation by ſtool or urine; but immediately after the operation, has frequently obſerved her urine to be gelatinous.

When free from the Dyſphagia ſhe is conſtantly affected with the Epilepſy, ſo that ſhe has now laboured under the former ſeven years, and under the latter twelve years. When free from fits her appetite is good, belly natural, menſes have been, and continue to be regular, and in all other reſpects is in tolerable health, and able to perform her ordinary buſineſs.

She is ſenſible of the approach of the Epileptic Fits, but the Dyſphagia comes on ſuddenly, and during its continuance ſhe complains of little or no pain, but has a ſenſation of ſtricture or tightneſs in her throat, &c.

She has taken a variety of medicines, but has reaped no advantage from any thing but *æther*, the effects of which, were very ſlight and tranſitory.

Taking into conſideration the aſcribed cauſe of her diſorder, the relief ſhe had received from *æther*, her lax habit of body, and eſpecially the abſence of all ſymptoms which indicated

any local affection of her head, I apprehended a great degree of irritability depending on a laxity of the nervous ſyſtem, might in a great meaſure, be the cauſe of all her complaints.

Well acquainted with the ſtrengthening and tonic properties of copper, I was reſolved to give it a fair trial, and am happy to find, by the event, that it has anſwered my moſt ſanguine expectations.

January, 9. I accordingly ordered her the following pills, *viz.*

Cuprum Ammoniacum, xxxii *grains.*

Crumbs of Bread, a ſufficient quantity, to be well mixed up into a paſte and divided into 64 equal parts or pills. One of theſe pills to be taken every morning and night; the doſe to be increaſed according to circumſtances.

January, 26. Soon after ſhe takes the pills, they have a very peculiar effect upon her, which ſhe is unable to deſcribe; ſhe however continued them for 5 days, then emmitted them for 7 days. She now began again, and took one, night and morning, with nearly the ſame effects. The epileptic fits returned every day for ten days; ſince that time, ſhe has only had a fit once in 3 or 4 days,. I now ordered her to take three pills every day, and if ſhe is able, to increaſe the doſe to four.

February 10. Has taken all the pills and has had but two fits ſince laſt report. Ordered her to have double the quantity of pills, and to increaſe the doſe according to the effects they produce.

February 28. Began with four pills each day, which produced nearly the ſame effects as two did when ſhe firſt took them. She has now increaſed the doſe to 7 or 8 every day, without any ſenſible effect. Continues free from fits. Ordered her ſome more pills.

March 16. Has continued to take 8 or 9 pills every day, they produce no ſenſible effects. Has had no fit. Ordered more pills.

April. 1. Has taken all the pills, and increaſed the doſe to eleven in a day. Continues free from fits, and thinks herſelf perfectly well.

June 17. Has continued perfectly well till the third of this month, at which time ſhe was ſeized with a violent looſeneſs, which laſted ten days, and then ceaſed without any remedies. On the ſeventh, or four days after ſhe had been affected with the looſeneſs, ſhe was again ſeized with the epileptic fits, and has had one or two every day ſince. They continue about one hour, during which ſhe is inſenſible and much convulſed. Has had no return of the dyſphagia, but ſince the looſeneſs, has been frequently affected with hickup and ſymptoms threatening ſuffocation, which however go off as ſoon as ſhe gets a free diſcharge of wind upwards. Appetite pretty good, ſleeps tolerably, has no thirſt, and her menſes are regular. Ordered the pills of *Cuprum Ammoniacum* to be repeated, and to begin with one, morning and night, and to increaſe the doſe as before directed.

July 5. On the 18th of June, ſhe began to take the pills, and took one night and morning as ordered. They now produce ſymptoms very different from what they did before. About a quarter of an hour after ſhe has taken them, ſhe becomes giddy, light headed, and in every reſpect ſeems to be in a ſtate of intoxication. Theſe ſymptoms continue about an hour, when ſhe is affected with nauſea and ſickneſs at ſtomach, but never vomits, afterwards ſhe breaks out into a ſweat, in which ſhe continues near an hour, and then becomes perfectly well. Since the 22d of June, has been entirely free from fits, hickup, and all other ſymptoms which uſually threaten or precede them. Her menſes did not appear the laſt period. Her appetite is good, and her belly regular. Ordered her to take a pill and one half every morning and night.

July 25. Has continued the pills, but from ſome miſtake in the directions, has only taken one pill and a half in the day, inſtead of three; this quantity, however, produces the uſual effects. She has been in good health and free from all her complaints, till two o'clock on Sunday morning, viz. the 23d, when ſhe was ſeized with the Dyſphagia, and has not been ſince able to ſwallow the leaſt particle of either ſolid or fluid food. In other reſpects ſhe is in good health, and complains of a ſenſation both of hunger and thirſt, and has had no evacuation either by ſtool or urine, ſince ſhe was affected with the *ſpaſm*. On Friday, (21ſt) ſhe very imprudently aſſiſted in removing ſome hay from the banks of the river Eſk, which were overflowed, in this buſineſs ſhe was obliged to wade up to the knees in water a conſiderable length of time, during a very heavy and inceſſant rain. To this circumſtance, fatigue, &c. ſhe attributes, I think with reaſon, the preſent attack.

Wedneſday, 26, about eleven o'clock, A. M. The *probang* was introduced, and as ſoon as it was withdrawn ſhe ſwallowed without any difficulty a little *æther* and water. No convulſions or alarming ſymptoms occurred, as had been uſually the caſe before; ſhe was only affected with ſome trifling ſpaſmodic contractions of the ſtomach and gullet, attended with no pain, but with a peculiar kind of noiſe, and eructation of wind, all which however ſoon went off, and ſhe became perfectly well. Her menſes appeared almoſt immediately after the operation. Ordered her to continue one pill and a half night and morning, for a few days, and then to increaſe the doſe to two pills, twice a day.

Auguſt 12. Has been free from fits, and has had no return of the Dyſphagia, and is in every reſpect in very good health. She has taken four pills a day ſince the 30th of laſt month. They ſtill continue to produce ſymptoms reſembling intoxication. Repeat them, and let her take two night and morning.

September 7. Has finiſhed her pills ſome time ago, and remains free from fits, but has complained of great pain in her head for ſome days; belly coſtive. Ordered her head to be ſhaved, and to apply a large bliſtering plaiſter to it.

Take of *Rufus's Pills* 2 *drachms.*
Aſſafætida 1 *drachm.*

Syrup of Rhubarb a ſufficient quantity, mix and divide the maſs into 40 pills, two or three of which are to be taken every night at bed time. Ordered the Copper pills to be omitted.

October 4. The bliſter was applied as directed, remained on the head 48 hours, and diſcharged a conſiderable quantity of lymph, which removed the complaint of her head. She has likewiſe taken all the laxative pills, which procured a ſtool or two every day. While ſhe was taking them, ſhe perſpired profuſely, and what is ſomewhat remarkable, the ſweat tinged her linen of a yellow colour. Has had no return of the Epilepſy ſince the 22d of June, nor of the Dyſphagia ſince the 26th of July. At preſent ſhe is free from all complaints. Ordered her to have a box of the Copper pills, and to be diſmiſſed, with orders to return, ſhould any change occur in her ſituation.

Continuation of her Caſe. October 28. Having buſineſs in town, ſhe called to acquaint me that ſhe has had no return of her fits, altho ſhe did not get the laſt box of pills as ordered, owing to a want of *Cuprum Ammoniacum*. On Monday laſt, viz. 23d, during the night ſhe had a diſcharge of blood from both her ears, which was preceded by ſome little pain in her head, which is now gone off. Has had no appearance of menſes ſince the 26th of July.

March 10, 1781. Continues free from all complaints, and her menſes are now regular.

May 15. On the 9th, ſhe perceived ſome little difficulty of ſwallowing, which however ſoon went off on making uſe of the Copper pills.

June 16. Continues free from all complaints.

TABLE I. Of Deaths, Ages, and Conditions.

Ages	males.	females
Under 1 month	9	15
Betw. 1-2 mon.	5	4
2-3 -	2	2
3-6 -	2	3
6-9 -	1	4
9-12 -	1	
1-2 years old	14	11
2-3 -	9	4
3-4 -	3	6
4-5 -	3	5
5-10 -	5	11
10-15 -	2	1
15-20 -	5	1
Total of the above Ages	61	67

Ages	bachelors.	husbands.	widowers	maids.	wives.	widows.	Total.
20-30	2	4		9	1	1	17
30-40	3	3			2		8
40-50	1	4			4	1	10
50 60	3	2			3	1	9
60-70	3	5	2	1	1	9	21
70-80	1	6			4	7	18
80-90	1	2	3			3	9
90-100	1		1			1	3
100-103						2	2
total of ages & conditions.	15	26	6	10	15	25	97

Total of ages under 20 years { Males 61, Females 67 } 128

Total of all Ages and Conditions 225

TABLE III.

Of the Deaths in each Month and Seaſon.

Deaths in	males.	females.	Total.	Total of Deaths in each Seaſon.
January,	11	6	17	
February,	10	8	18	47 Winter.
March,	4	8	12	
April,	14	15	29	
May,	14	20	34	81 Spring.
June,	8	10	18	
July,	7	8	15	
Auguſt,	4	12	16	50 Summer.
September,	11	8	19	
October,	11	14	25	
November,	6	7	13	47 Autumn.
December,	8	1	9	
Total	108	117	225	

Chriſtenings	Males	females	total
	132	120	252

N. B. The regiſter of Chriſtenings by no means aſcertains the number of births, for in St. Mary's Pariſh, which is by much the moſt populous of the two, a great number of children are baptized privately, none of whom are regiſtered.

TABLE II.

TABLE II.

Deaths and Diſeaſes of Perſons of different Ages.

DISEASES.	under 5 years	betw 5 & 10 years	10 & 15	15 & 20	20 & 30	30 & 40	40 & 50	50 & 60	60 & 70	70 & 80	80 & 90	90 & 100	100 & 103	Total.
I. Febrile Diseases.														
Ague contracted in the South (G 2*)						1								1
Inflammatory Fever. (G 4)	1				1	1								3
Nervous Fever (5)					2		1							3
Peripneumony (11)					1		1							2
Inflammation of the Bowels (16)				1										1
Stone and Gravel (19)									1	1				2
Rheumatiſm Chronic (22)								1						1
Small-Pox (28)	3													3
Meaſles (30)	28	5												33
Scarlet Fever (32)					1									1
Thruſh (35)	12													12
Conſumption (38)	4	7	1	3	6	4	4	3	3					35
Worm Fever	5	2												7
II. Nervous Diseases,														
Apoplexy (42)					1			1	1					3
Palſy (43)	1							1		1				3
Indigeſtion (45)									1					1
Aſthma (55)						1			2					3
Chincough (57)	10													10
Colic (59)										1				1

Asthma (55)														1
Chincough (57)					1			2						2
Colic (59)	10													10
Looseness (61)									1					1
Insanity (67)				1					3					4
III. Diseases of the Habit.*						1	1							2
Weakness of Infancy	37	1												38
Decay of Age								10	9	8	3	2		32
Dropsy (75)		1			1			1		1				4
Dropsy of the Belly (79)					1			1						2
King's Evil (84)				1										1
Jaundice (91)									1					1
IV. Local Diseases.														
Difficulty of making water (123)								1						1
Ulcer (145)					1									1
Difficult Delivery					1									1
Unknown Diseases	2		1				3	3	1					10
Accidents			1		1				1					3
Total	103	16	3	6	17	8	10	9	21	18	9	3	2	225

* Cullen. Synop. Nosolog. Method. tertia editio.